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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,748	07/31/2001	Atsuko Ohara	826.1739	2775

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EXAMINER

LE, BRIAN Q

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,748

Applicant(s)

OHARA ET AL.

Examiner

Brian Q. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 19, 21, 23, and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 14, 15, 17, 18, 20, 22 and 24 is/are allowed.
- 6) ☒ Claim(s) 13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Amendment and Arguments

1. Applicant's amendment filed January 19, 2006, has been entered and made of record.
2. Rejection of claims 2-6 and 13 under 35 U.S.C. 112, first paragraph is withdrawn.
3. Rejection of claim 20 under 35 U.S.C. 101 is withdrawn.
4. Applicant's arguments, see Remarks page 10, filed 01/19/2006, with respect to the rejection(s) of claim(s) 13 and 16 under 35 U.S.C. 102(b) by Hongo and Katayama have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Imaizumi et al. U.S. Patent No. 6,633,406.
5. Applicant's arguments with regard to claims 13 and 16 have been fully considered, but are not considered persuasive because of the following reasons:

Regarding claim 13, the Applicant argues (page 11 of Remarks) that Imaizumi does not teach the determination of or recognizing whether a target pixel is white. The Examiner respectfully disagrees. Imaizumi teaches the determination of the target/processing pixel whether is white by comparing to a threshold ("64") and set the pixel to white if the pixel's value is less than or equal to "64" (column 7, lines 5-14).

Thus, the rejections of all of the claims are maintained.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

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patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 13 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,633,406 to Imaizumi et al. (hereinafter "Imaizumi").

As to claim 13, Imaizumi discloses an image processing apparatus, comprising:

a first binarization device performing a local binarization on a multiple-valued image (column 3, lines 24-26; Fig. 1) and recognizing whether a target pixel is white (the determine of the target/processing pixel whether is white by comparing to a threshold ("64") and set the pixel to white if the pixel's value is less than or equal to "64") (column 7, lines 5-14);

a second binarization device performing local binarization again on pixels which are determined as white pixels in a vicinal area of a target pixel when the target pixel is determined as a white pixel by the local binarization performed said first binarization device (column 3, lines 28-31; Fig. 1; note that the Imaizumi's second binarization device always performs a second binarization, although with a different threshold, and therefore will perform it on a pixel regarded as a white pixel in a vicinal area of a target pixel when the target pixel is regarded as white pixel in the local binarization by said first binarization device) (Imaizumi teaches this concept column 7, lines 1-14 wherein the method will binarize value of pixel to white pixel if the pixel is consider to be white, that is, under a certain threshold); and

an output device outputting a process result of said second binarization device (e.g., Fig. 1, printing unit).

Regarding claim 16, Imaizumi discloses an image processing apparatus, comprising:

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a determination device determining whether a target pixel is a background based on complexity of a pattern in a vicinal area of a target pixel during local binarization of a multiple-valued image including the target pixel (binarization level 1/first binarization) (column 7, lines 15-28);

a binarization device performing again a local binarization of the target pixel based on a determination result of said determination device (binarization level 2/second binarization)(column 3, lines 25-30); and

an output device outputting a process result of said binarization device (FIG. 2, element 170 and element 180).

Allowable Subject Matter

8. Claims 1-8, 14-15, 17-18, 20, 22 and 24 are allowed.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL
March 7, 2006

JINGGE WU
PRIMARY EXAMINER

